

PATENT COOPERATION TREATY

REC'D 28 APR 2005

WIPO

PCT

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)Applicant's or agent's file reference
see form PCT/ISA/220FOR FURTHER ACTION
See paragraph 2 belowInternational application No.
PCT/IB2005/050247International filing date (day/month/year)
21.01.2005Priority date (day/month/year)
23.01.2004International Patent Classification (IPC) or both national classification and IPC
G11B20/00Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
☐ Box No. II Priority
☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐ Box No. IV Lack of unity of invention
☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐ Box No. VI Certain documents cited
☐ Box No. VII Certain defects in the international application
☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Ogor, M

Telephone No. +31 70 340-4458



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050247

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050247

Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	8
	No: Claims	1-7 9-13
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

Item V

Reference is made to the following documents:

D1: EP 0 997 899 A2

D2: WO 02 41316 A1

D3: US 2001 0046198 A1

1) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1 and 13 does not involve an inventive step in the sense of Article 33(3) PCT.

1.a) D1 discloses a record carrier (DVD) comprising a data area for storing data in the form of marks (par.21: main information area), in which the data is encoded by means of a channel code (DVDs use EFM+ modulation) and which comprises first information relating to a watermark (fig.20; par.92-93: the BCA data is superimposed to the video to be recorded to the main area); it comprises a non-data area (par.21: additional information area in the inner or outer peripheral portion of the disc, specifically different from the lead-in or lead-out area) comprising second information relating to the watermark (par.92-93: BCA data; it is superimposed to the main area in a watermarking effect); the first and second information can be said to form the watermark.

The subject-matter of claim 1 therefore differs from D1 in that the first information relating to the watermark is introduced by controlling a parameter of the channel code to introduce a predetermined run length distribution in the marks on the disc.

This amounts merely to specifying the type of watermark effect introduced in the data area. Choosing a watermarking effect linked to non-standard channel encoding as known from D2 is merely one of several straightforward possibilities (such as, for instance, modifying the wobble parameters) from which the skilled person would select in accordance with circumstances without the exercise of inventive skill. Therefore the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step.

The same objection applies to the method of claim 13, *mutatis mutandis*.

1.b) D3 discloses a record carrier (optical disc) comprising a data area for storing data in the

form of marks (fig.1: data area 2), in which the data is encoded by means of a channel code (EFM+) wherein a parameter of the channel code is controlled to introduce a predetermined runlength distribution (par.56,74: pit strings, called certification pits, longer or shorter than standard EFM+) in the marks on the disc thereby introducing first information relating to a watermark (par.71: disc identifier); it comprises a data area (fig.12b, par.82: specific area) comprising second information relating to the watermark (par.82: address end length of certification pits); the first and second information can be said to form the watermark.

The subject-matter of claim 1 therefore differs from D3 in that the data area comprising the second information is a non-data area. The problem to be solved by this feature is to prevent the second information from being altered by malignant users.

The use of a non-data area in D1 provides the same advantages as in the present application (par.6: preventing illegal rewriting). The skilled person would therefore regard it as a normal option to include the feature of a non-data area in the disc of D3 to store the second information and solve the problem posed. Therefore the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step.

The same objection applies to the method of claim 13, *mutatis mutandis*.

2) Dependent claims 2-7 9-12 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

- claims 2-5: see D1 and D3 and the corresponding passages cited in the search report.
- claims 6 7 9-12: see D1 and D2 and the corresponding passages cited in the search report.

3) The combination of the features of dependent claim 8 is neither known from, nor rendered obvious by, the available prior art.

PATENT COOPERATION TREATY

REC'D 28 APR 2005

WIPO

PCT

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)Applicant's or agent's file reference
see form PCT/ISA/220FOR FURTHER ACTION
See paragraph 2 belowInternational application No.
PCT/B2005/050247International filing date (day/month/year)
21.01.2005Priority date (day/month/year)
23.01.2004International Patent Classification (IPC) or both national classification and IPC
G11B20/00Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Ogor, M

Telephone No. +31 70 340-4458



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050247

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/050247

Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	8
	No: Claims	1-7 9-13
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

Item V

Reference is made to the following documents:

D1: EP 0 997 899 A2

D2: WO 02 41316 A1

D3: US 2001 0046198 A1

1) The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1 and 13 does not involve an inventive step in the sense of Article 33(3) PCT.

1.a) D1 discloses a record carrier (DVD) comprising a data area for storing data in the form of marks (par.21: main information area), in which the data is encoded by means of a channel code (DVDs use EFM+ modulation) and which comprises first information relating to a watermark (fig.20; par.92-93: the BCA data is superimposed to the video to be recorded to the main area); it comprises a non-data area (par.21: additional information area in the inner or outer peripheral portion of the disc, specifically different from the lead-in or lead-out area) comprising second information relating to the watermark (par.92-93: BCA data; it is superimposed to the main area in a watermarking effect); the first and second information can be said to form the watermark.

The subject-matter of claim 1 therefore differs from D1 in that the first information relating to the watermark is introduced by controlling a parameter of the channel code to introduce a predetermined run length distribution in the marks on the disc.

This amounts merely to specifying the type of watermark effect introduced in the data area. Choosing a watermarking effect linked to non-standard channel encoding as known from D2 is merely one of several straightforward possibilities (such as, for instance, modifying the wobble parameters) from which the skilled person would select in accordance with circumstances without the exercise of inventive skill. Therefore the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step.

The same objection applies to the method of claim 13, *mutatis mutandis*.

1.b) D3 discloses a record carrier (optical disc) comprising a data area for storing data in the

form of marks (fig.1: data area 2), in which the data is encoded by means of a channel code (EFM+) wherein a parameter of the channel code is controlled to introduce a predetermined runlength distribution (par.56,74: pit strings, called certification pits, longer or shorter than standard EFM+) in the marks on the disc thereby introducing first information relating to a watermark (par.71: disc identifier); it comprises a data area (fig.12b, par.82: specific area) comprising second information relating to the watermark (par.82: address end length of certification pits); the first and second information can be said to form the watermark.

The subject-matter of claim 1 therefore differs from D3 in that the data area comprising the second information is a non-data area. The problem to be solved by this feature is to prevent the second information from being altered by malignant users.

The use of a non-data area in D1 provides the same advantages as in the present application (par.6: preventing illegal rewriting). The skilled person would therefore regard it as a normal option to include the feature of a non-data area in the disc of D3 to store the second information and solve the problem posed. Therefore the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step.

The same objection applies to the method of claim 13, *mutatis mutandis*.

2) Dependent claims 2-7 9-12 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

- claims 2-5: see D1 and D3 and the corresponding passages cited in the search report.
- claims 6 7 9-12: see D1 and D2 and the corresponding passages cited in the search report.

3) The combination of the features of dependent claim 8 is neither known from, nor rendered obvious by, the available prior art.